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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,877

09/29/2003

Harry Schilling

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EXAMINER

LU, ZHIYU

ART UNIT

PAPER NUMBER

2618

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,877	<b>Applicant(s)</b> SCHILLING ET AL.	
	<b>Examiner</b> ZHIYU LU	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartram (US Patent#5465395) in view of Waters et al. (US Patent#6611776).

Regarding claim 1, Bartram teaches device for broadband transmission of digital signals between at least one first unit and at least one second unit mobile along a predetermined path relative to said first unit, in particular via non-contacting rotary joints, said first unit comprising:

a data source for generating a serial data stream (abundantly clear that there is a data source);

Art Unit: 2618

a transmitter for generating electrical signals from said serial data stream from said data source (3 of Fig. 1);

a transmitter conductor array for conducting said electrical signals generated by said transmitter (1 of Fig. 1);

and said second unit comprising:

a receiving antenna for tapping electrical signals in the near field of said transmitter conductor array (shown in 6 of Fig. 1);

a receiver for receiving the signals tapped by said receiving antenna (abundantly clear that a receiver is inside 6 of Fig. 1 for signal reception);

a data sink for subsequent processing of the signals received by said receiver (abundantly clear that there is a data sink to take care of received signal inside 6 of Fig. 1).

But, Bartram does not expressly disclose characterized in that a controller is provided for controlling said data stream by signaling a desired value of data rate or data package size to said data source or said transmitter.

Waters et al. teach a controller is provided for controlling said data stream by signaling a desired value of data rate or data package size to said data source or said transmitter (4 of Fig. 1, column 3 line 66 to column 4 line 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a controller to change data rate taught by Waters et al. into the device of Bartram, in order to maintain or improve communication quality.

Art Unit: 2618

Regarding claim 2, Bartram and Waters et al. teach device for broadband transmission of digital signals between at least one first unit and at least one second unit mobile along a predetermined path relative to said first unit as explained in response to claim 1 above.

Regarding claim 8, Bartram and Waters et al. teach method of broadband transmission of digital signals between at least one first unit and at least one second unit mobile along a predetermined path relative to said first unit, in particular via non-contracting rotary joints as explained in response to claim 1 above.

Regarding claim 3, Bartram and Waters et al. teach the limitation of claim 1.

Bartram and Waters et al. teach in that said controller comprises means for storing data and for outputting the data at different data rates to said transmitter (obviously there is temporary cache for processing data).

Regarding claim 4, Bartram and Waters et al. teach the limitation of claim 1.

Waters et al. teach characterized in that the desired value is predetermined by a desired-value generator according to actual transmission characteristics of a data transmission path between said transmitter and said receiver or according to another measurable value (column 3 line 52 to column 4 line 13).

Art Unit: 2618

Regarding claim 6, Bartram and Waters et al. teach the limitation of claim 1.

Waters et al. teach characterized in that a micro controller is provided for controlling and diagnosing the device (4 of Fig. 2).

Regarding claim 7, Bartram and Waters et al. teach the limitation of claim 1.

Bartram and Waters et al. teach characterized in that the device is self-learning and adapts itself dynamically to respective conditions of operation, (obvious as the transmission rate being adapted based on self-learned channel quality).

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartram (US Patent#5465395) in view of Waters et al. (US Patent#6611776) and Marchetto et al. (US Patent#5914959).

Regarding claim 5, Bartram and Waters et al. teach the limitation of claim 1.

Waters et al. teach characterized in that an analyzer means is disposed between said receiver and said data sink (Fig. 2), but Bartram and Waters et al. do not expressly disclose that said analyzer means comprises additional means for signaling incorrectly transmitted data to said controller by means of an additionally provided transmission channel, and that said controller means is designed for repeating incorrectly received data packages upon request by said analyzer means.

Art Unit: 2618

Marchetto et al. teach means for signaling incorrectly transmitted data to said controller by means of an additionally provided transmission channel, and that said controller means is designed for repeating incorrectly received data packages upon request by said analyzer means (abstract, Fig. 2, column 1 line 57 to column 3 line 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate means for retransmission taught by Marchetto et al. into the device of Bartram and Waters et al., in order to provide resilient communication.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZHIYU LU whose telephone number is (571)272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-27503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhiyu Lu  
Examiner  
Art Unit 2618

/Z. L./  
Examiner, Art Unit 2618  
September 29, 2008

/Duc Nguyen/  
Supervisory Patent Examiner, Art Unit 2618